



347010

NR. 1860 S. 2/3

PTO/SB/01A (07-08)

Approved for use through 01/31/2007. OMB 0651-0032  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN  
APPLICATION DATA SHEET (37 CFR 1.76)**

Title of  
Invention

**IN VITRO METHOD FOR THE DIAGNOSIS OF CARDIOVASCULAR  
FUNCTIONALITY OF BONE MARROW-PRECURSOR CELLS (BMP) AND/OR CIRCULATION  
PRECURSOR CELLS DERIVED FROM BLOOD (BDP)**

As the below named inventor(s), I/we declare that:

This declaration is directed to:

- ☐ The attached application, or
- ☒ Application No. 10/574,380, filed on October 13, 2004,  
☒ as amended on April 3, 2006 (if applicable);

I/we believe that I/we am/are the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought;

I/we have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above;

I/we acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me/us to be material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT International filing date of the continuation-in-part application.

**WARNING:**

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

All statements made herein of my/own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may jeopardize the validity of the application or any patent issuing thereon.

**FULL NAME OF INVENTOR(S)**

Inventor one: Andreas M. Zeiher

Signature: 

Citizen of: DE

Inventor two: Christopher Heeschen

Signature: 

Citizen of: DE

☒ Additional inventors or a legal representative are being named on 1 additional form(s) attached hereto.

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/SB/02A (07-06)

Approved for use through 01/31/2007. OMB 0851-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

**DECLARATION****ADDITIONAL INVENTOR(S)**  
Supplemental Sheet

Page 2 of 2

<b>Name of Additional Inventor, if any</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle (if any))		Family Name or Surname	
Stefanie		Dimmeler	
Inventor's Signature <i>[Signature]</i>		Date 16. Febr. 07	
Residence: City	State	Country	Citizenship
Frankfurt / M.	-	Germany	DE
Mailing Address University Hospital Frankfurt Med. Clinic III - Molecular Cardiology Theodor-Stern-Kai 7 D - 60590 Frankfurt			
City	State	ZIP	Country
<b>Name of Additional Inventor, if any</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle (if any))		Family Name or Surname	
Inventor's Signature		Date	
Residence: City	State	Country	Citizenship
Mailing Address			
City	State	Zip	Country
<b>Name of Additional Inventor, if any</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle (if any))		Family Name or Surname	
Inventor's Signature		Date	
Residence: City	State	Country	Citizenship
Mailing Address			
City	State	Zip	Country

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PTO/SB/81 (01-06)

Approved for use through 12/31/2008. OMB 0651-0035  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

<b>POWER OF ATTORNEY and CORRESPONDENCE ADDRESS INDICATION FORM</b>	Application Number	10/574,380
	Filing Date	April 3, 2006
	First Named Inventor	Zeiber
	Title	IN VITRO METHOD FOR THE DIAGNOSIS OF CARDIOVASCULAR FUNCTIONALITY OF BONE MARROW PRECURSOR CELLS (B
	Art Unit	
	Examiner Name	
	Attorney Docket Number	To be assigned 81197-2

I hereby revoke all previous powers of attorney given in the above-identified application.

I hereby appoint:

☒ Practitioners associated with the Customer Number:

22504

OR

☐ Practitioner(s) named below:

Name	Registration Number

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please recognize or change the correspondence address for the above-identified application to:

☒ The address associated with the above-mentioned Customer Number

OR

☐ The address associated with Customer Number:

OR

<input type="checkbox"/> Firm or Individual Name			
Address			
City	State	ZIP	
Country			
Telephone	Email		

I am the:

☐ Applicant/Inventor.

☐ Assignee of record of the entire interest. See 37 CFR 3.71.

Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

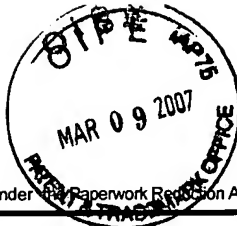
SIGNATURE of Applicant or Assignee of Record

Signature	<i>Dr. J. Jürgen Hahn</i>	Date	<i>May 11, 2006</i>
Name	<i>Prof. Dr. Jürgen Hahn</i>	Telephone	<i>0049/69/798-22732</i>
Title and Company	<i>Vice-President, Frankfurt University</i>		

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☐ \*Total of \_\_\_\_\_ forms are submitted.

This collection of information is required by 37 CFR 1.31, 1.32 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of



**STATEMENT UNDER 37 CFR 3.73(b)**

Applicant/Patent Owner: University of Frankfurt

Application No./Patent No.: 10/574,380

Filed/Issue Date: October 13, 2004

Entitled: IN VITRO METHOD FOR THE DIAGNOSIS OF CARDIOVASCULAR FUNCTIONALITY OF BONE MARROW-  
PRECURSOR CELLS (BMPs) AND/OR BLOOD-DERIVED CIRCULATING PRECURSOR CELLS (BDPs)

University of Frankfurt

a university

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title, and interest

The extent (by percentage) of its ownership interest is \_\_\_\_\_ %

in the patent application/patent identified above by virtue of either:

- A. ☐ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_

To: \_\_\_\_\_

The document was recorded in the United States Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

2. From: \_\_\_\_\_

To: \_\_\_\_\_

The document was recorded in the United States Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

3. From: \_\_\_\_\_

To: \_\_\_\_\_

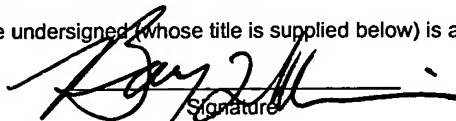
The document was recorded in the United States Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

- ☒ Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., a true copy of the original document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

  
Signature

06 March 2007  
Date

\_\_\_\_\_  
Printed or Typed Name

206-628-7621  
Telephone Number

Barry L. Davison, Ph.D., J.D.

Attorney for Applicants

Title

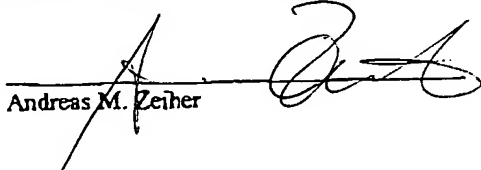
*Box 4, Munich, Germany 81247*  
**ASSIGNMENT**

WHEREAS, we, Andreas M. Zeiher residing at Deutschherrnufer 47, Frankfurt, Germany 60594; Christopher Heeschchen residing at ~~Wolgstrasse 5, Frankfurt, Germany 60431~~; and Stefanie Dimmeler residing at Deutschherrnufer 47, Frankfurt, Germany 60594 (ASSIGNORS) are the inventors named in an application for a Letters Patent of the United States entitled IN VITRO METHOD FOR THE DIAGNOSIS OF CARDIOVASCULAR FUNCTIONALITY OF BONE MARROW PRECURSOR CELLS (BMP) AND/OR CIRCULATION PRECURSOR CELLS DERIVED FROM BLOOD (BDP), said application was nationalized in the United States from PCT/EP2004/011503 filed on October 13, 2004 as Application No. 10/574,380 and claims priority to DE10347436.6 filed October 13, 2003;

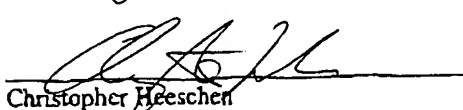
AND, WHEREAS, Frankfurt University, a university, having administrative offices Senckenberganlage 31, 60325 Frankfurt am Main, Germany (hereinafter referred to as ASSIGNEE) is desirous of acquiring the entire right, title and interest in the invention described in the said application;

NOW, THEREFORE, for sufficient, good and valuable consideration, the receipt of which is hereby acknowledged, we do hereby sell, assign, and transfer unto said ASSIGNEE, our entire right, title to and interest in said application and said inventions; any patent or reissues of any patent that may be granted thereon; and any applications which are improvements thereon, continuations, continuations-in-part, substitutes, or divisions of said applications, and all foreign applications and patents on said invention(s) to be held and enjoyed by ASSIGNEE as entirely as the same would have been held and enjoyed by us had this sale, assignment, and transfer not been made, and we do hereby further agree and promise to execute all instruments and render all such assistance as ASSIGNEE may request in order to make and prosecute any and all applications on said invention(s), to enforce any and all patents on said invention(s), and to confirm in ASSIGNEE legal title to said invention(s) and all applications and patents on said invention(s), all without charge to ASSIGNEE but at no expense to us.

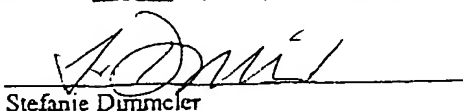
Executed in Seattle, this 2nd day of October, 2006 in Frankfurt.

  
 Andreas M. Zeiher

Executed in Seattle, this 18th day of September, 2006 in Munich / Germany.

  
 Christopher Heeschchen

Executed in Seattle, this 9th day of October, 2006 in Frankfurt.

  
 Stefanie Dimmeler